What Is Claimed Is:

1. A method of manufacturing a micro-electromechanical device comprising the steps of:

forming a moving member on a first substrate such that a first sacrificial layer is disposed between the moving member and the substrate;

encapsulating the moving member, including the first sacrificial layer, with a second sacrificial layer;

coating the second sacrificial layer with a first film formed of a material that establishes an hermetic seal with the substrate; and

removing the first and second sacrificial layers.

2. The method of claim 1, further comprising the step of forming an opening in the first film prior to removing the first and second sacrificial layers.

3. The method of claim 2, wherein said opening forming step is performed during said coating step.

4. The method of claim 2, wherein said opening forming step is performed after said coating step.

5. The method of claim 2, further comprising the step of sealing the opening after the first and second sacrificial layers are removed.

6. The method of claim 5, wherein said sealing step is performed by coating the first film with a second film formed of the same material as the first film.

7. The method of claim 2, wherein said step of removing the first and second sacrificial layers includes the step of immersing the switch in one of a reactive liquid solution, a reactive gas, and a supercritical fluid.

8. The method of claim 1, further comprising the step of forming a conductive layer on the first film.

9. The method of claim 8, further comprising the step of coating the conductive layer with a second film such that the conductive layer is disposed between the first and second films.

10. The method of claim 9, wherein the second film is the same material as the first film.

11. The method of claim 8, further comprising the step of connecting the conductive layer with a second circuit that causes the conductive layer to act as a counter electrode.

12. The method of claim 1, wherein the miniature electromechanical device is formed on a substrate with other circuit components and the first film covers only the electromechanical device.

13. The method of claim 1, further comprising the step of mounting the first substrate on a second substrate carrying other circuit components.

14. The method of claim 5, further comprising the step of coating the movable member with an anti-stiction film prior to said sealing step.

15. The method of claim 1, wherein a plurality of microelectromechanical devices are formed on the first substrate and encapsulated by the first film, and further comprising the step of cutting the substrate to separate the microelectromechanical devices.

16. A micro-electromechanical system (MEMS) device comprising:

a first substrate;

a first control circuit formed on said first substrate and including a first actuation element;

a movable member formed on said first substrate in spaced relation to said first actuation element, said movable member

being electrically conductive and movable in the direction of said first actuation element; and

a helmet defining a hermetically sealed chamber around said movable member, said helmet being formed by removing a sacrificial layer between said movable member and said helmet.

17. The MEMS device of claim 16, and further comprising an inert gas disposed within said hermetically sealed chamber.

18. The MEMS device of claim 16, and further comprising a second control circuit with an actuator element disposed within said helmet.

19. The MEMS device of claim 16, and further comprising a plurality of moving members formed on said substrate, wherein said helmet defines a plurality of hermetically sealed chambers around said movable members.

20. The MEMS device of claim 16, wherein said helmet is formed of a silicon oxynitride film.

21. The MEMS device of claim 16, wherein said helmet has tapered sides.

22. A method of fabricating a micro-electromechanical system (MEMS) device comprising the steps of:

forming a control circuit with an actuating element on a substrate;

defining a movable member above the actuating element by applying a first sacrificial layer over the actuating element, depositing a conductive material such that the material extends from the circuit to cover the first sacrificial layer, and removing portions of the sacrificial layer around the movable member but not between the moving member and the substrate;

encapsulating the moving member on all sides with a second sacrificial layer;

coating the second sacrificial layer with a material that forms an hermetic seal with the substrate; and

removing the first and second sacrificial layers.

23. The method of claim 22, wherein said step of applying a first sacrificial layer includes tapering edges of the first sacrificial layer.

24. The method of claim 23, wherein said step of applying a second sacrificial layer includes tapering edges of the second sacrificial layer.

25. The method of claim 24, wherein said tapering step includes baking the first and second sacrificial layers after curing.